

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims

Claims 1-144 (Canceled without disclaimer or prejudice)

145. (Previously presented) A communications assembly, comprising:
an electrically groundable platform;
a shell supported on said platform and being electrically grounded thereto, said shell having a plurality of exterior wall portions fabricated from electrically conductive material;
an enclosure having a common exterior wall portion with said shell and being attached thereto, said common exterior wall portion being lined with a magnetic shield material;
at least one power supply cable entering said enclosure through said common exterior wall portion and said magnetic shield material; and
an articulated communications mast comprising:
a base member supported on said platform; and
at least two rigid mast segments pivotally interconnected in series and being supported by said base member, and wherein at least two of said pivotally interconnected mast segments are selectively pivotable relative to each other between positions wherein said at least two pivotally interconnected mast segments are coaxially aligned with each other and other positions wherein said at least two pivotally mast segments are not coaxially aligned relative to each other.

146. (Previously presented) The communications assembly of claim 145 wherein said shell is attached to said electrically groundable platform by at least one shock absorbing mount and at least one grounding conductor.

147. (Previously presented) The communications assembly of claim 146 wherein at least one shock-absorbing mount comprises:

a support base coupled to said platform, said support base having an attachment member protruding therefrom for attachment to said shell; and

a flexible member between said support base and said shell.

148. (Previously presented) The communications assembly of claim 147 further comprising a leg corresponding to each said shock absorbing mount and coupled to said attachment member such that said flexible member is between said leg and said support base, said leg being coupled to said shell.

149. (Previously presented) The communications assembly of claim 148 wherein each said leg is pivotably coupled to said shell.

150. (Previously presented) The communications assembly of claim 145 wherein said electrically groundable platform comprises:

an electrically conductive frame;

a plurality of wheels mounted to said electrically conductive frame; and

at least one electrically conductive outrigger assembly coupled to said electrically conductive frame and selectively movable between a grounding position and a non-grounding position.

151. (Previously Presented) The communications assembly of claim 150 wherein said at least one said outrigger assembly is selectively laterally extendable and retractable relative to said electrically conductive frame.

152. (Previously Presented) The communications assembly of claim 151 wherein said outrigger assembly comprises:

a vertical support housing having a selectively extendable and retractable support leg therein; and

a lateral support member telescopingly received in a corresponding portion of said electrically conductive frame and coupled to said vertical support member such that said vertically support member can be selectively laterally extended and retracted relative to said electrically conductive frame.

153. (Previously presented) The communications assembly of claim 152 wherein said selectively extendable and retractable support leg may be selectively extended and retracted relative to the vertical support housing by a crank assembly.

154. (Previously presented) The communications assembly of claim 150 wherein said electrically conductive frame supports at least one floor panel thereon.

155. (Previously presented) The communications assembly of claim 154 wherein at least one said floor panel is fabricated from wood.

156. (Previously presented) The communications assembly of claim 145 wherein said articulated mast is electrically grounded to said platform.

157. (Previously presented) The communications assembly of claim 145 further comprising power generating means on said platform.

158. (Previously presented) The communications assembly of claim 157 wherein said power generating means at least comprises at least one battery.

159. (Previously presented) The communications assembly of claim 157 wherein said power generating means at least comprises a generator, at least one solar panel or at least one fuel cell.

160. (Previously presented) The communications assembly of claim 159 wherein said generator is propane powered.

161. (Previously presented) The communications assembly of claim 159 wherein said generator is gasoline powered.

162. (Previously presented) The communications assembly of claim 145 wherein an antenna conductor is supported on said articulated communications mast, said antenna conductor entering said enclosure through said common exterior wall portion and said magnetic shield material.

163. (Currently amended) An articulated mast for supporting a weight of at least one object vertically above a surface, said articulated mast comprising:

an upstanding load bearing base member configured to be supported on a surface;

a first rigid, load bearing mast segment having one end thereof pivotally coupled to said base member by a first joint assembly configured to distribute a load experienced by said first mast segment to said base member, said first joint assembly including at least one first load distribution member attached to an end of said base member, said at least one first load distribution member having a first perimeter that is at least as large as a perimeter of one end of said first rigid mast segment, and said first rigid mast segment being selectively movable back and forth between an initial folded position and an extended position wherein said first mast segment is coaxially aligned with a portion of said base member; and

a second rigid, load bearing mast segment having a second end pivotally interconnected to another end of said first rigid mast segment by a second joint assembly configured to

distribute other load experienced by said second mast segment to said first rigid mast segment,
said second joint assembly including at least one second load distribution member attached to
said another end of said first rigid mast segment, said at least one second load distribution
member having a second perimeter that is at least as large as a perimeter of said one end of said
second rigid mast segment and wherein said first and second rigid mast segments are selectively
pivotal relative to each other back and forth between an initial folded position wherein said
second rigid-mast segment is adjacent to said first rigid mast segment and a second extended
position wherein said second rigid mast segment is coaxially aligned with said first rigid mast
segment to transfer the weight of the at least one object to said upstanding base member.

164. (Previously presented) The articulated mast of claim 163 further comprising
means for pivoting said first mast segment between said position wherein said first mast segment
is coaxially aligned with said portion of said base member and other positions wherein said first
mast segment is not coaxially aligned with said base member.

165. (Previously presented) The articulated mast of claim 164 wherein said means for
pivoting comprises a device selected from the group of devices consisting of a hydraulic
cylinder, a pneumatic cylinder, and a stepper motor.

Claims 166 – 180 (Canceled without disclaimer or prejudice)

181. (Previously presented) An articulated mast, comprising:
a base member;
a first rigid mast segment pivotally coupled to said base member and being selectively
movable between a position wherein said first mast segment is coaxially aligned with a portion
of said base member and other positions wherein said first mast segment is not coaxially aligned
with said base member;
a second rigid mast segment pivotally interconnected to said first rigid mast segment

wherein said first and second rigid mast segments are selectively pivotable relative to each other between positions wherein said first and second rigid mast segments are coaxially aligned with each other and other positions wherein said first and second rigid mast segments are not coaxially aligned relative to each other;

an apparatus for housing electrically powered components supported on said base member, said apparatus comprising:

an electrically groundable platform having a plurality of legs attached thereto;

a shell supported on said electrically groundable platform and being electrically grounded thereto, said shell having a plurality of exterior wall portions and housing the electrically powered components therein, said shell fabricated from electrically conductive material;

an enclosure having a common exterior wall portion with said shell and being attached thereto, said common exterior wall portion being lined with a magnetic shield material; and

at least one power supply cable entering said enclosure through said common exterior wall portion and said magnetic shield material.

182. (Previously presented) The articulated mast of claim 181 wherein said legs comprise leg assemblies that are selectively extendable and retractable.

183. (Previously presented) The articulated mast of claim 182 wherein at least one said leg is selectively laterally extendable and retractable relative to said electrically groundable platform.

184. (Previously presented) The articulated mast of claim 183 wherein each said leg assembly comprises:

a vertical support housing having a selectively extendable and retractable support leg therein; and

a lateral support member telescopingly received in a corresponding portion of said electrically groundable platform and coupled to said vertical support member such that said vertically support member can be selectively laterally extended and retracted relative to said electrically groundable platform.

185. (Previously presented) The articulated mast of claim 184 wherein said selectively extendable and retractable support leg may be selectively extended and retracted relative to the vertical support housing by a crank assembly.

186. (Previously presented) The articulated mast of claim 181 wherein said electrically groundable platform comprises an electrically conductive frame.

187. (Previously presented) The articulated mast of claim 181 wherein said electrically conductive frame supports at least one floor panel thereon.

188. (Previously presented) The articulated mast of claim 187 wherein at least one said floor panel is fabricated from wood.

189. (Previously presented) An articulated communications mast, comprising:
a plurality of rigid mast segments wherein at least two said mast segments are interconnected in series and are selectively movable relative to each other between positions wherein said at least two mast segments are coaxially aligned with each other in serial fashion and other positions wherein said at least two mast segments are not coaxially aligned relative to each other;

at least one communication signal device supported by at least one of said mast segments;
and

at least one conductor operably coupling said communication signal device to electronic equipment housed within a shell, said at least one conductor passing into a magnetic shield

enclosure coupled to said shell.

190. (Previously presented) The articulated communications mast of claim 189 wherein at least one of said at least one communication signal devices comprises an antenna.

191. (Previously presented) The articulated communications mast of claim 189 wherein one of said plurality of said mast segments is attached to a base member.

192. (Previously presented) The articulated communications mast of claim 189 wherein said plurality of mast segments are movable from a position wherein said mast segments extend vertically from said base member in a coaxially aligned end-to-end orientation to said position wherein said at least two mast segments are not coaxially aligned in a folded position.

193. (Previously presented) The articulated communications mast of claim 189 wherein said plurality of mast segments are supported on a platform and are movable from a position wherein said mast segments extend vertically from said platform in a coaxially aligned end-to-end orientation to said position wherein said at least two mast segments are not coaxially aligned in a folded position.

194. (Previously presented) The articulated communications mast of claim 193 wherein when said mast segments are in said folded position, none of the mast segments extend laterally beyond a perimeter of said platform.

195. (Previously presented) The articulated communications mast of claim 189 wherein at least two said mast segments are movably interconnected by an actuator for moving said at least two mast segments between said position wherein said at least two mast segments are coaxially aligned with each other and said other positions wherein said at least two mast segments are not coaxially aligned relative to each other.

196. (Previously presented) The articulated communications mast of claim 195 wherein said actuator is selected from the group of actuators comprising: a hydraulic cylinder, a pneumatic cylinder, and a lead screw/stepper motor.

197. (Previously presented) The articulated mast of claim 193 wherein said platform is electrically grounded.

198. (Previously presented) The articulated mast of claim 197 wherein said platform is mounted on wheels and has at least two selectively extendable outriggers operably coupled thereto.

199. (Currently amended) An articulated communications mast, comprising:
an upstanding rigid load bearing base member configured to be supported on a surface;
a first load bearing mast segment having a first end coupled to said base member by a first joint assembly including at least one first load distribution member attached to an end of said base member, said at least one first load distribution member having a first perimeter that is at least as large as a perimeter of one end of said first mast segment;

a second load bearing mast segment having a first end movably coupled to a second end of said first mast segment by a second joint assembly including at least one second load distribution member attached to said second end of said first mast segment wherein said at least one second load distribution member has a second perimeter that is at least as large as a perimeter of said second end of said first mast segment;

a third load bearing mast segment having a first end movably coupled to a second end of said second mast segment by a third joint assembly including at least one third load distribution member attached to said second end of said second mast segment wherein said at least one third load distribution member has a third perimeter that is at least as large as a perimeter of said second end of said second mast segment, said first, second and third mast segments being

selectively movable relative to each other back and forth between positions wherein said first, second and third mast segments are coaxially aligned with each other in serial fashion and other positions wherein said first second and third mast segments are not coaxially aligned relative to each other; and

at least one communication signal device supported by at least one of said first, second and third mast segments, such that a weight thereof gets transmitted to said upstanding rigid base member when said first, second and third mast segments are coaxially aligned with said upstanding base member.

200. (Previously presented) The articulated communications mast of claim 199 wherein said base member comprises a mast post and wherein said first end of said first mast segment is movably attached to an end of said mast post.

201. (Previously presented) The articulated communications mast of claim 199 wherein said base member is supported on an apparatus for housing electrically powered components comprising:

an electrically groundable portable platform;

a shell supported on said portable platform and being electrically grounded thereto, said shell having a plurality of exterior wall portions and housing the electrically powered components therein, said shell fabricated from electrically conductive material;

an enclosure having a common exterior wall portion with said shell and being attached thereto, said common exterior wall portion being lined with a magnetic shield material; and

at least one power supply cable entering said enclosure through said common exterior wall portion and said magnetic shield material.

202. (Previously presented) The articulated communications mast of claim 201 wherein said shell is attached to said portable groundable platform by at least one shock absorbing mount and at least one grounding conductor.

203. (Previously presented) The articulated communications mast of claim 202 wherein at least one shock-absorbing mount comprises:

- a support base coupled to said portable platform, said support base having an attachment member protruding therefrom for attachment to said shell; and
- a flexible member between said support base and said shell.

204. (Previously presented) The articulated communications mast of claim 203 further comprising a leg corresponding to each said shock absorbing mount and coupled to said attachment member such that said flexible member is between said leg and said support base, said leg being coupled to said shell.

205. (Previously presented) The articulated communications mast of claim 204 wherein each said leg is pivotably coupled to said shell.

206. (Previously presented) The articulated communications mast of claim 201 wherein said portable platform comprises:

- an electrically conductive frame;
- a plurality of wheels mounted to said electrically conductive frame; and
- at least one electrically conductive outrigger assembly coupled to said electrically conductive frame and selectively movable between a grounding position and a non-grounding position.

207. (Previously presented) The articulated communications mast of claim 206 wherein said at least one said outrigger assembly is selectively laterally extendable and retractable relative to said electrically conductive frame.

208. (Previously presented) The articulated communications mast of claim 207 wherein said outrigger assembly comprises:

a vertical support housing having a selectively extendable and retractable support leg therein; and

a lateral support member telescopingly received in a corresponding portion of said electrically conductive frame and coupled to said vertical support member such that said vertically support member can be selectively laterally extended and retracted relative to said electrically conductive frame.

209. (Previously presented) The articulated communications mast of claim 208 wherein said selectively extendable and retractable support leg may be selectively extended and retracted relative to the vertical support housing by a crank assembly.

210. (Previously presented) The articulated communications mast of claim 206 wherein said electrically conductive frame supports at least one floor panel thereon.

211. (Previously presented) The articulated communications mast of claim 210 wherein at least one said floor panel is fabricated from wood.

212. (Previously presented) The articulated communications mast of claim 206 wherein said articulated mast is electrically grounded to said portable platform.

213. (Previously presented) The articulated communications mast of claim 206 further comprising power generating means on said portable platform.

214. (Previously presented) The articulated communications mast of claim 206 wherein an antenna conductor is supported on said articulated mast, said antenna conductor entering said enclosure through said common exterior wall portion and said magnetic shield

material.

215. (Previously presented) An articulated mast, comprising:

a mast post;

a first hinge block having a mast socket therein for receiving an end of said mast post therein, said first hinge block further comprising a first hinge assembly mounting portion adjacent said mast socket;

a first rigid mast segment;

a second hinge block having a first socket therein sized to receive an end of said first rigid mast segment therein, said second hinge block further comprising a second hinge assembly mounting portion adjacent said first socket;

a hinge assembly mounted to said first and second hinge assembly mounting portions to enable said first rigid mast segment to be selectively movable between a position wherein said first rigid mast segment is coaxially aligned with a portion of said mast post and other positions wherein said first rigid mast segment is not coaxially aligned with said mast post and such that when said first rigid mast segment is coaxially aligned with said mast post, an end of said first hinge block is in confronting relationship with an end of said second hinge block; and

a second rigid mast segment pivotally interconnected to said first rigid mast segment wherein said first and second rigid mast segments are selectively pivotable relative to each other between positions wherein said first and second rigid mast segments are coaxially aligned with each other and other positions wherein said first and second rigid mast segments are not coaxially aligned relative to each other.

216. (Previously presented) The articulated mast of claim 215 further comprising means for pivoting said first mast segment between said position wherein said first mast segment is coaxially aligned with said portion of said base member and other positions wherein said first mast segment is not coaxially aligned with said mast post.

217. (Previously presented) The articulated mast of claim 216 wherein said means for pivoting comprises a device selected from the group of devices consisting of a hydraulic cylinder, a pneumatic cylinder, and a stepper motor.

218. (Previously presented) The articulated mast of claim 215 further comprising first releasable retaining means for selectively retaining said end of said first hinge block in confronting relationship with said end of said second hinge block.

219. (Previously presented) The articulated mast of claim 218 wherein said first releasable retaining means comprises apparatus selected from the group consisting of bolts, pins and clamps.

220. (Previously presented) The articulated mast of claim 215 wherein said first and second hinge blocks are fabricated or cast metal.

221. (Previously presented) The articulated mast of claim 215 wherein said first and second hinge blocks are fabricated from metal and are of welded construction.

222. (Previously presented) An articulated communications mast, comprising:
a base member supported on an apparatus for housing electrically powered components comprising:

an electrically groundable portable platform;

a shell supported on said portable platform and being electrically grounded thereto, said shell having a plurality of exterior wall portions and housing the electrically powered components therein, said shell fabricated from electrically conductive material;

an enclosure having a common exterior wall portion with said shell and being attached thereto, said common exterior wall portion being lined with a magnetic shield material; and

at least one power supply cable entering said enclosure through said common exterior wall portion and said magnetic shield material, said articulated communications mast further comprising:

a first mast segment having a first end coupled to said base member;

a second mast segment having a first end movably coupled to a second end of said first mast segment;

a third mast segment having a first end movably coupled to a second end of said second mast segment, said first, second and third mast segments being selectively movable relative to each other between positions wherein said first, second and third mast segments are coaxially aligned with each other in serial fashion and other positions wherein said first second and third mast segments are not coaxially aligned relative to each other; and

at least one communication signal device supported by at least one of said first, second and third mast segments.

223. (New) An articulated mast for supporting a weight of at least one object vertically above a surface, said articulated mast comprising:

an upstanding load bearing mast post configured to be supported on a surface:

a first hinge block having a mast socket for receiving an end of said mast post therein, said first hinge block having a first hinge assembly mounting portion;

a second hinge block having a first socket therein and a second hinge assembly mounting portion thereon adjacent said first socket;

a hinge assembly mounted to said first and second hinge assembly mounting portions;

a first rigid load bearing mast segment extending from said first socket in said second hinge block such that said first mast segment is selectively movable back and forth between an initial folded position and an extended position wherein said first mast segment is coaxially aligned with a portion of said mast post; and

a second rigid, load bearing mast segment pivotally interconnected to said first rigid mast

segment wherein said first and second rigid mast segments are selectively pivotable relative to each other back and forth between an initial folded position wherein said second rigid-mast segment is adjacent to said first rigid mast segment and a second extended position wherein said second rigid mast segment is coaxially aligned with said first rigid mast segment to transfer the weight of the at least one object to said upstanding base member.

224. (New) The articulated mast of claim 223 further comprising means for pivoting said first mast segment between said position wherein said first mast segment is coaxially aligned with said portion of said mast post and other positions wherein said first mast segment is not coaxially aligned with said mast post.

225. (New) The articulated mast of claim 224 wherein said means for pivoting comprises a device selected from the group of devices consisting of a hydraulic cylinder, a pneumatic cylinder, and a stepper motor.

226. (New) The articulated mast of claim 223 further comprising first releasable retaining means for selectively retaining said end of said first hinge block in confronting relationship with said end of said second hinge block.

227. (New) The articulated mast of claim 226 wherein said first releasable retaining means comprises apparatus selected from the group consisting of bolts, pins and clamps.

228. (New) The articulated mast of claim 223 wherein said first and second hinge blocks are fabricated from cast metal.

229. (New) The articulated mast of claim 223 wherein said first and second hinge blocks are fabricated from metal and are of welded construction.

230. (New) The articulated mast of claim 223 wherein said second mast segment is pivotally coupled to said end of said first mast segment by a joint assembly comprising:
a hinge block coupled to the end of said first mast segment; and
another hinge block pivotally hinged to said hinge block and coupled to an end of said second mast segment.

231. (New) The articulated mast of claim 223 further comprising a third mast segment pivotally coupled to an end of said second mast segment.

232. (New) The articulated mast of claim 231 wherein said third mast segment is pivotally coupled to said second mast segment by a third joint assembly comprising:
a fifth hinge block coupled to another end of said second mast segment; and
a sixth hinge block pivotally hinged to said second hinge block and coupled to an end of said third mast segment.

233. (New) The articulated mast of claim 232 wherein said second mast segment is selectively pivotable relative to said first mast segment from a position wherein said second mast segment is adjacent to said first mast segment and another position wherein said second mast segment is coaxially aligned with said first mast segment.

234. (New) The articulated mast of claim 233 wherein said third mast segment is selectively pivotable between a position wherein said third mast segment is adjacent said second mast segment and another position wherein said third mast segment is coaxially aligned with said second mast segment.

235. (New) The articulated mast of claim 231 wherein said second mast segment is selectively pivotable relative to said first mast segment from a position wherein said second mast segment is coaxially aligned with said first mast segment and another position wherein said second mast segment is adjacent said third mast segment.

236. (New) The articulated mast of claim 235 wherein said third mast segment is selectively pivotable between a position wherein said third mast segment is coaxially aligned with said second mast segment and another position wherein said third mast segment is between said first mast segment and said second mast segment.

237. (New) The articulated mast of claim 231 further comprising an antenna supported by said third mast segment.